

Amendments to the Claims:

Please amend Claims 1, 14, 15, 20, 24, and 27 and add the following new Claim 30.

1. (Currently Amended) A transgenic plant comprising in its genome an artificial genetic construct comprising a sense protein coding sequence and a promoter which promotes expression of the MinD protein coding sequence in cells of the plant, wherein: (a) expression of the sequence in the plant causes alteration in the size, shape and/or number of plastids in plant cells of the plant as compared to non-transgenic plants of the species, (b) the MinD protein encoded by the protein coding sequence has at least ~~80%~~ 92% sequence identity with SEQ ID NO:2, and (c) the MinD protein includes sequences of amino acid residues which, when compared by sequence alignment to SEQ ID NO:2, are identical to residues 95 to 97 and 98 to 109 respectively of SEQ ID NO:2.

2. (Previously presented) The plant of Claim 1, wherein the coding sequence is an Arabidopsis MinD protein coding sequence.

3. (Previously presented) A transgenic plant comprising in its genome an artificial genetic construct comprising a sense protein coding sequence and a promoter which promotes expression of the MinD protein coding sequence in cells of the plant, wherein expression of the sequence in the plant causes alteration in the size, shape and/or number of plastids in plant cells of the plant as compared to non-transgenic plants of the species, wherein the coding sequence is SEQ ID NO:1.

4. (Original) The plant of Claim 1, wherein the construct comprises in 5' to 3' order a CaMV 35S promoter, a MinD protein coding sequence, and an OCS terminator.

5. (Previously presented) The plant of Claim 4, wherein the coding sequence is an Arabidopsis MinD protein coding sequence.

6. (Previously presented) The plant of Claim 4, wherein the coding sequence is SEQ ID NO:1.

7. (Original) The plant of Claim 1, wherein the plastids are chloroplasts.

8. (Original) An isolated DNA sequence comprising the sequence of SEQ ID NO:1.
9. (Cancelled)
10. (Original) Seed of the plant of Claim 1.
- 11.-13. (Cancelled)
14. (Currently Amended) A plant seed comprising in its genome a genetic construct comprising a MinD protein coding sequence and a promoter, not natively associated with the MinD protein coding sequence, which promotes expression of the MinD protein coding sequence in the plant, wherein : (a) expression of the sequence in the plant causes alteration in the size, shape and/or number of plastids in plant cells of the plant as compared to nontransgenic plants of the species, (b) the MinD gene encodes a protein having at least ~~80%~~ 92% sequence identity with SEQ ID NO:2, and (c) the MinD protein includes sequences of amino acid residues which, when compared by sequence alignment to SEQ ID NO:2, are identical to residues 95 to 97 and 98 to 109 respectively of SEQ ID NO:2.
15. (Currently amended) The plant of Claim 14, wherein the coding sequence is an Arabidopsis MinD protein coding sequence ~~and a Tagetes MinD protein coding sequence.~~
16. (Previously presented) The plant of Claim 14, wherein the coding sequence is SEQ ID NO:1.
17. (Original) The plant of Claim 14, wherein the construct comprises in 5' to 3' order a CaMV 35S promoter, a MinD protein coding sequence, and an OCS terminator.
18. (Previously presented) The plant of Claim 17, wherein the coding sequence is an Arabidopsis MinD protein coding sequence.
19. (Previously presented) The plant of Claim 17, wherein the coding sequence is SEQ ID NO:1.

20. (Currently Amended) A genetic construct comprising a MinD protein coding sequence in either a sense or antisense orientation and a promoter that promotes expression of the sequence in plants, the promoter not being natively associated with the protein coding sequence, the MinD gene encoding a protein having at least a ~~80%~~ 92% sequence identity with SEQ ID NO:2, and the MinD protein including sequences of amino acid residues which, when compared by sequence alignment to SEQ ID NO:2, are identical to residues 95 to 97 and 98 to 109 respectively of SEQ ID NO:2.

21. (Previously presented) The construct of Claim 20, wherein the MinD protein coding sequence is of an Arabidopsis MinD protein coding sequence.

22. (Previously presented) The construct of Claim 20, wherein the coding sequence is SEQ ID NO:1.

23. (Original) The construct of Claim 20, wherein the promoter is a CaMV 35S promoter.

24. (Currently Amended) A method for altering the size, shape and/or number of plastids in plant cells comprising the steps of constructing a genetic construct comprising a MinD protein coding sequence and a promoter, not natively associated with the MinD protein coding sequence, which promotes expression of the MinD protein coding sequence in plants, introducing the genetic construct into a plant, selecting a plant that has received a copy of the genetic construct, and growing the plant under conditions that allow expression of the gene, thereby producing a plant with altered size shape or number of plastids, the MinD gene encoding a protein having at least a ~~80%~~ 92% sequence identity with SEQ ID NO:2, the MinD protein including sequences of amino acid residues which, when compared by sequence alignment to SEQ ID NO:2, are identical to residues 95 to 97 and 98 to 109 respectively of SEQ ID NO:2.

25. (Previously presented) The method of Claim 24, wherein the coding sequence is of an Arabidopsis MinD protein coding sequence.

26. (Previously presented) The method of Claim 24, wherein the coding sequence is SEQ ID NO:1.

27. (Currently Amended) A DNA sequence isolated from its native genome, the isolated DNA sequence comprising a plant MinD gene, the MinD gene encoding a protein having at least a ~~80%~~ 92% sequence identity with SEQ ID NO:2, the MinD protein encoded by the MinD gene including sequences of amino acid residues which, when compared by sequence alignment to SEQ ID NO:2, are identical to residues 95 to 97 and 98 to 109 respectively of SEQ ID NO:2.

28. (Previously presented) The DNA sequence of Claim 27, wherein the DNA sequence is SEQ ID NO:1.

29. (Cancelled).

30. (New) A transgenic plant comprising in its genome an artificial genetic construct comprising a sense protein coding sequence and a promoter which promotes expression of the MinD protein coding sequence in cells of the plant, wherein expression of the sequence in the plant causes alteration in the size, shape and/or number of plastids in plant cells of the plant as compared to non-transgenic plants of the species, wherein the coding sequence encodes a protein having the amino acid sequence of SEQ ID NO:2.